

Claims

1. A method (800) for measuring the distance covered by a person, **characterised in**

5 - fastening to the person (101) a magnetic sensor (212) with substantially stationary direction relative to the person,

- monitoring (808) any deviation of the magnetic sensor relative to the magnetic field (304) external to the sensor, and

10 - counting the times (812) the deviation of the magnetic sensor relative to the external magnetic field exceeds a set limit value.

2. A method as defined in claim 1, **characterised in** that, before the performance starts, at least one of the following data is fed into the distance meter (102) reading the output of the magnetic sensor: type of sport, length of one lap or one side, data about the geometric pattern of the track and set value for the deviation of the magnetic sensor relative to an external magnetic field.

20 3. A method as defined in claim 1, **characterised in** that the fitness trainer's position is also detected and a decision about continuing the measurement is made on the basis of the detected position and the fed type of sport.

25 4. A method as defined in claim 1, **characterised in** that the distance covered is determined by the counted times and the fed length of a lap or a side.

5. A method as defined in claim 1, **characterised in** that data are delivered from the distance meter (102) to at least one other data processing device (112).

30 6. A distance meter (102) for measuring the distance covered by an object, **characterised in** that the distance meter (102) is a wearable distance meter, and that it comprises a magnetic sensor (212) for determining the direction of the magnetic sensor (212) relative to a magnetic field (304) external to the sensor (102), and also a counter (207), and that the wearable distance meter (102) is arranged to decrease 35 the value of the counter (207) when the deviation of the magnetic sensor (212) relative to an external magnetic field (304) exceeds the set limit value.

7. A distance meter as defined in claim 6, **characterised** in that the distance meter (102) comprises fastening means (108) for fastening the sensor with substantially stationary direction relative to the object and in that the fastening means is a press stud, a strap, a belt, a suspender (108) or a garment equipped with a pocket substantially adapted to the size and shape of the meter, such as a pair of trunks.
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8. A distance meter as defined in claim 6, **characterised** in that the distance meter (102) comprises control means (214, 216), such as a press button and a display for feeding at least one of the following data into the distance meter: type of sport, length of one lap or side, information about the geometric pattern of the track and a set value for the deviation of the magnetic sensor relative to an external magnetic field.
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9. A distance meter as defined in claim 6, **characterised** in that the distance meter (102) includes a sensor (222) for detecting the swimmer's swimming position and vertical position, respectively.
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10. A distance meter as defined in claim 6, **characterised** in that the distance meter (102) comprises a controller (220), which is arranged to evaluate the consistency of the measured lap cycle with at least one of the following: fed type of sport, length of lap, length of side, geometric pattern of the track, deviation of the magnetic sensor from the limit value of an external magnetic field and spent time.
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11. A distance meter as defined in claim 6, **characterised** in that the distance meter (102) is arranged in data transmission communication (110) with at least one other data processing device (112).
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12. A distance meter as defined in claim 11, **characterised** in that the data processing device is a computer, a display screen or a device measuring pulse data (112).
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13. A distance meter as defined in claim 6, **characterised** in that the distance meter (102) comprises a means (224) for detecting the operating mode of the wearable distance meter, the means allowing the conclusion whether the meter is being worn or not worn by the user.
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14. A distance meter as defined in claim 6, characterised in that the distance meter (102) is arranged to give an alarm when a preset distance or number of laps is covered.